

THE DIFFICULTIES OF ARMENIAN SCHOLARS TRYING TO PUBLISH IN INTERNATIONAL JOURNALS

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Abstract

This study investigates the problems that Armenian scholars and researchers face when they try to publish in international journals. Ninety-six researchers of the three branches of the Armenian National Academy of Sciences participated in the study: Natural Sciences, Physical, Mathematical and Technical Sciences and the Humanities.

The results of the study show that the main difficulties facing Armenian scholars are language proficiency and lack of material resources. In spite of the increasing number of publications in English, the majority of these researchers' publications are still in Russian, which shows the on-going link between the Russian and Armenian scientific communities. However, it is mainly the older generation of scholars who consider publishing in Russian important. No young scholar mentioned Russian as an important language to publish in. The results of the study also show that Armenian senior researchers are not at an advantage in comparison with junior researchers when they try to publish in international journals.

INTRODUCTION

During the Soviet period, Armenian scholars and researchers were isolated from the international scientific community. The

language of science was Russian. People wrote academic papers mainly in Russian. Even today, Russian scientific literature is used widely and is readily accessible to many Armenian scientists since many of them

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have had a Russian education. Yet, after the collapse of the Soviet Union, Armenian scholars have greater opportunity to communicate with their colleagues all over the world. They have more chances to participate in international conferences, present their research to the international community and publish in international journals. In this new reality, a switch from Russian to English in writing academic papers has become necessary for Armenian scholars and researchers as the language of the majority of international scientific publications is English.

In order to get published in international journals, the Armenian researcher should not only carry out significant research but also meet certain standards established for writing a scientific paper. Hence, in order to get published in international journals, Armenian scholars have to overcome various obstacles as they have been accustomed to writing articles according to Russian standards and the academic discourse of international journals was not familiar to them.

Many applied linguists have investigated the difficulties of non-Anglophone researchers when they try to publish in international journals (Flowerdew 1999, Flowerdew 2000, Canagarajah 2002, Swales 2004 et al.). However, no study has so far investigated the difficulties that Armenian researchers experience. Therefore, the purpose of the present study is to investigate the difficulties that Armenian scholars face when they try to publish in international journals and to find out whether English language proficiency is considered an obstacle by Armenian scholars. The study also examines whether experienced senior researchers have more chances to get published in

international journals in comparison with novice junior researchers.

Theoretical Framework

The big debate in the current research world appear to center on the distinction between native speaking (NS) and non-native speaking (NNS) scholars. In order to discuss the issues this dichotomy appears to throw up, we need to consider the prevailing views related to the spread of English in the world.

Brutt-Griffler (2002) differentiates English-speaking contexts into 'native' and 'non-native' contexts. Within non-native contexts, there is another division - English as a second or as a foreign language. Kachru (1985) presents this idea in his model of the distribution and dissemination of English through his illustration of concentric circles. In the *Inner Circle* are included countries, where English is a native language, in the *Outer Circle* - countries where English is a second language and in the *Expanded Circle* - countries where English is a foreign language. Wood (2001) argues that Kachru's model cannot be applied to the academic world as International Scientific English is defined not in terms of a native or non-native speaker language but in terms of a language of a member in an academic discourse community which, as Swales (1990) points out, implies having "common goals, participatory mechanisms, information exchange, community specific genres, a specialized terminology and a high general level of expertise" (p.29). This view, however, does not contradict Kachru's model. Kachru's model and the view of the academic world in terms of discourse com-

munities are interconnected and overlapping since scholars who are members of the same discourse community can belong to different circles (Figure 1).

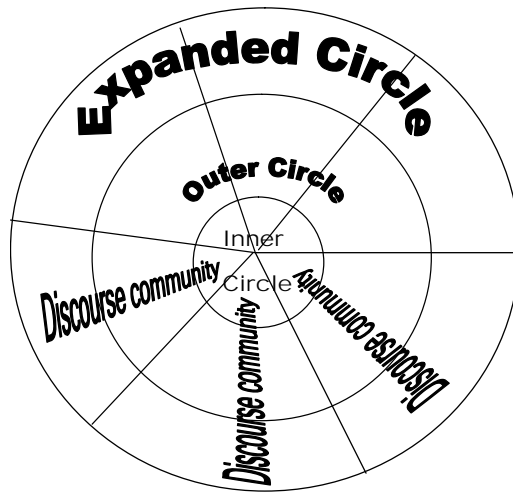


Figure 1: Discourse communities and the distribution of English.

According to Figure 1, countries of the Inner Circle form the academic center, countries of the Outer and Expanded Circles are periphery countries. Canagarajah (2002) points out that center scholar have more chances to get published because they belong to the academic circle created by the center. In this case the closer the country is to the Inner Circle, the more chances scholars have to get published and scholars of the Expanded Circle probably have the most difficulties with being published in international journals. The supporters of this view (Braine 2003, Canagarajah 2002, Canagarajah 2003, Sasaki 2003) point out that NNSs have to overcome more difficulties to get published. Canagarajah (2002) argues that even if the research has great significance, it cannot be

published if it does not conform to the specific genre established by the journal. NNSs experience difficulties related not only to their language proficiency and to their ability to use the academic discourse of a particular field but also to many technical nuances: lack of material resources (i.e., computers, access to the Internet, printers, photocopiers, etc.), access to the recent research in the field, difficulties in corresponding with editors and reviewers, interpreting comments and suggestions made by the referees and the editors, different cultural practices and social conditions.)

However, some scholars emphasize that the difficulties, which non-native scholars experience are similar to those experienced by native speakers (Wood 2001, Hyland 2004, Swales 2004). Both NS and NNS need to learn to write using an academically accepted style. They have similar problems: difficulties with cohesion, lexical choice, sentence order and tense-choice. For these authors the differences between NS and NNS experiences are more quantitative than qualitative. They emphasize that one's level of expertise in English is not as important as the scientific significance of one's research. According to the followers of this view, in order to become a member of a particular scientific community, the scholar should produce research claims that are significant in the field and acceptable to the community.

Swales (2004) emphasizes that more and more articles are being published from non-Anglophone countries. Today's research world is becoming more international and non-Anglophone researchers appear to get more recognition. In this case the distinction between NS and NNS is no longer significant. Swales proposes another distinc-

tion - between experienced senior researchers (SR) and less experienced junior researchers (JR). According to Swales, this distinction determines one's success in getting published.

However, we believe that the SR/JR dichotomy may work in the countries of the Inner Circle as SRs of that circle have social power within the whole discourse community and not only in the part which belongs to the Inner Circle. SRs of the center occupy key positions, set standards and determine what is considered good or important in their field. They have a great influence on their colleagues all over the world. They are not only recognized in their respective discipline(s) and successful in publishing but also establish the rules as they are also the referees for major international journals (Hyland, 2004).

This SR/JR dichotomy probably does not work in case of periphery countries. Being a SR in the periphery does not imply having more chances to publish in international journals. SRs of the Outer and Expanded Circles may have the power in their local discourse communities but not in the center. In order to be recognized internationally, local 'big names' must publish in English and participate in the conferences where again English is the language of communication. Therefore, SRs in the periphery are probably not privileged when compared to JRs. It is even possible that JRs will be more successful since they are more flexible. They are well placed to learn English at a faster pace and are able to adopt English academic discourse in their writing. It might be helpful to distinguish between internationally recognized researchers and internationally non-recognized researchers

in the research world and its scheme of things.

Many factors may affect the success of getting published: the significance of the research, the researchers' experience in the discipline and in publishing, their language proficiency, availability of materials/ resources, technical problems and so forth. Both NSs and NNSs have to overcome these difficulties but in addition to the problems experienced by NSs, NNSs might have difficulties specific to them. Some of the difficulties might be more significant in one country and less significant in another country. In order to investigate the problems of Armenian scholars, the Armenian academic context should be considered.

THE ARMENIAN ACADEMIC CONTEXT

The National Academy of Sciences (NAS) of the Republic of Armenia is a major institution where important research is conducted. The NAS was founded in 1943 (Sargsian et al., 2003). It was a part of the Soviet academic system until the collapse of the Soviet Union. Since Russian was declared the second official language of the Soviet Union (first being the mother tongue of the Republic), almost all the academic literature was in Russian. Scholars and researchers published their works mainly in Russian, following the standards of academic writing established by the Soviet System (Khazanov, 1995).

After the collapse of the Soviet Union, the Armenian National Academy of Sciences became independent and faced many political, financial, organizational and other

problems. During the first post-independence years, it was very hard to continue working on scientific projects as only 1% of the budget of Armenia was given to the Academy. However, since the collapse of the USSR, many international funds, benevolent organizations and individual sponsors have provided financial support to the researchers of Armenia (Sargsian et al., 2003).

After independence, the Armenian NAS had to set their goals anew: to establish new relations with the academic centres of other countries and collaborate with them, to be involved in the international research world. In 1993-94 the NAS signed a contract with the Russian National Academy of Sciences. It became a member of the International Council of Scientific Unions and the International Association of Academies of Science. Nowadays the scientists and researchers of the NAS are involved in projects of different international organizations, such as NATO. Different institutions of the NAS are members of the International Federation of Information Processing, International Brain Research Organization, and the International Astronomy Union. The NAS actively collaborates with researchers in Russia, the USA, Great Britain, China, Germany, France, Italy, India, among other countries.

The economic difficulties and hardships that ensued in the post-independence years triggered a 'brain drain'. As a result, the number of young researchers in Armenia has been continually/increasingly decreasing. In light of this, the average age of candidates

of science¹ is 40 and that of researchers with a Ph.D. is 60 (Sargsian et al., 2003).

According to the Research Proceedings of the *NAS of the Republic of Armenia, 2004*, the NAS has 3 branches, which include about 50 research institutions where the total number of researchers is 2273 (Table 1). The same report presents the number of published works in 2004 (Table 2). According to this data, 1354 papers were published in Armenia and 798 - abroad.

Publishing in English may create many difficulties for the Armenian researchers. However, no research has been done related to the difficulties that Armenian researchers experience when they attempt to publish in international journals. Therefore, to investigate these issues the following research questions are posed:

1. *What difficulties do Armenian researchers face while trying to publish in international journals?*
2. *Is language proficiency an obstacle for Armenian scholars when they try to publish in international journals?*

METHODOLOGY

The present study is a survey, which has been predicated on the fundamentals of a qualitative research methodology. This section provides information about the participants of the study, data collection instruments and the procedures.

¹Since the Soviet period the following scientific degrees have been existing in Armenia: bachelor, master, candidate of science and doctor of science. Both candidate of science and doctor of science are considered equal to the western PhD.

Table 1: The number of scholars and researchers in the NAS of the Republic of Armenia

Branches	N of researchers	N of academicians members	N of corresponding with PhD	N of members for PhD	N of candidates
The Branch of Physical, Math. and Technical Sciences	748	14	5	114	333
The Branch of Natural Sciences	968	9	3	104	423
The Branch of the Humanities	515	9	2	105	248
Total in the branches	2231	32	10	323	1004
Total in the NAS	2273	41	11	337	1024

Table 2: The number of published works in 2004

Branches	N of monographs		N of textbooks		N of articles, theses and other papers	
	in Armenia	abroad	in Armenia	abroad	in Armenia	abroad
The Branch of Physical, Math. and Technical Sciences	6	3	1	-	377	329
The Branch of Natural Sciences	11	6	-	2	326	370
The Branch of the Humanities	95	3	4	-	651	99
Total in the NAS	112	12	5	-	1354	798

Participants

The study was conducted in Yerevan. The participants of the study were 96 researchers and scholars of the National Academy of Sciences of the Republic of Armenia who either had a doctorate or were doctoral candidates. Different age

groups participated in the study. The age range was from 22 to 66+. Both males and females were included in the study. The participants were researchers of the three branches of the NAS: Physical, Mathematical and Technical Sciences, Natural Sciences and the Humanities.

Data Collection Instruments

Questionnaires and semi-structured interviews were used as main instruments for data collection. The rationale for the use of these instruments will now be described in further detail.

Questionnaire

Since all the respondents were Armenians with different levels of English proficiency, the questionnaire was administered in Armenian (the English version of the questionnaire is given in Appendix A). In the questionnaire, the respondents indicated some background information: age, degree, branch and field of research.

The questionnaire consisted of 9 questions; 4 questions required a Yes/No response, 2 questions required respondents to choose one answer out of several given, and for 2 questions the respondents could choose more than one answer out of those provided. In the last question, the respondents could add any comments about their experiences in attempting to publish in English. Some questions (3 out of 9) required respondents to explain their responses. The questions were about respondents' publication experiences (the respondents had to indicate whether they had any scholarly publications since 2000 and in what languages, what language they considered most important and why). The questionnaire contained a question about the way the respondents write articles for international journals and questions about the respondents' experiences in attempting to publish in international journals, and any difficulties connected with this.

Interviews

The interview questions were designed to elicit the respondents' personal ideas. We attempted to minimize my influence on what the interviewee might say. However, at the same time, the interviews followed a framework so as to be able to cover certain key areas identified in our research. The questions were open-ended and descriptive, such as "Do you think that senior researchers have more chances to get published in international journals? Why? Why not?" (see Appendix B for sample questions). The interviewees were also asked to clarify and explain their responses to the questionnaire questions. For example, "In your questionnaire you identified Armenian as the most important language to publish in. Your explanation was for developing our *culture and science*. What do you mean here?". Contrast questions were used to compare participants' responses across interviews. "Some participants of this study think that language is not a problem if the research is significant. What do you think? Why?" The length of interviews varied from 20 minutes to more than an hour.

Procedures

In the present study, 132 questionnaires were distributed to the researchers with a doctorate degree in Science or candidates for a doctoral degree, which is 10% of all PhDs and candidates for a PhD in the NAS. The researchers of the Branch of Natural Sciences were given 52 questionnaires and 43 were returned, the Branch of Physical, Mathematical and Technical Sciences - 44 questionnaires and 26 were returned, the Branch of the Humanities were given 36 questionnaires and 27 were returned (see

Table 3). The overall number of returned questionnaires was 96 (72.7%). The responses were tallied and the percentages were calculated.

The interviews were conducted after the questionnaires were analyzed. Six people were interviewed (2 researchers from each branch). The interviewees belonged to different age groups: 22-35 age group - 3 researchers, 46-55 - 1 researcher, 56-65 - 1 researcher, 66+ - 1 researcher. The majority of interviewees (5 researchers) were candidates for a PhD and 1 researcher had a doctoral degree. The interviewees were chosen taking into consideration the responses in their questionnaires. The interviews were

all recorded and analysed. The interview data was listened to for repeated categories and sorted into categories. The aim was to look for both commonalities and differences within the framework of interviews.

ANALYSIS AND DISCUSSION OF FINDINGS

The results of the study show that out of 96 respondents 74 (77%) are candidates for a doctoral degree and 22 (23%) are doctors of science (Table 4). The majority of participants (56.3%) belong to the 46-65 age group. This fact suggests that the scien-

Table 3: The number of distributed and returned questionnaires.

Branches	N of distributed questionnaires	Returned questionnaires	
		N of returned questionnaires	%
The Branch of Physical, Math. and Technical Sciences	52	43	82.7
The Branch of Natural Sciences	44	26	59.0
The Branch of the Humanities	36	27	75.0
Total in the NAS	132	96	72.7

Table 4: Background information about the respondents.

Background information	Branch of Natural Sciences		Branch of Physical, Math. and Technical Sciences		Branch of the Humanities		Total in NAS	
	N	%	N	%	N	%	N	%
Age:								
22 - 35	6	14.0	4	15.4	5	18.5	15	15.6
36 - 45	5	11.6	2	7.6	6	22.2	13	13.5
46 - 55	16	37.2	7	26.9	3	11.1	26	27.1
56 - 65	12	27.9	10	38.5	6	22.2	28	29.2
66 or above	4	9.3	3	11.5	7	25.9	14	14.6
Highest degree obtained								
doctor of science	6	14	8	30.8	8	29.6	22	22.9
candidate for a doctoral degree	37	86	18	69.2	19	70.4	74	77.1

tists in Armenia are really ‘getting older’, which is also emphasized by Sargsian et al. (2003). The younger generation does not seem interested in developing a scientific career. Only 15 (15.6%) participants are 22-35 years of age.

Out of 96 respondents, 89 (92.7%) have written scholarly publications since 2000: 53 (55%) - in Armenian, 74 (77%) - in Russian and 52 (54%) - in English. In the humanities the percentage of publications in

Armenian is the highest - 21 (77.8%) and publications in English is the lowest - 6 (22.2%) (Table 5).

As the majority of publications are in Russian - 74 (77%), there is probably still a significant link between Russian and Armenian scientists. Thirty five participants (36.5%) considered Russian as the most important language for them to publish in (Table 6).

Table 5: The languages of the respondents’ publications.

Branches	Total in the NAS					
	Armenian		Russian		English	
	N	%	N	%	N	%
Branch of Natural Sciences	23	53.5	38	88.4	27	62.8
Branch of Physical, Math. and Technical Sciences	9	34.6	23	88.5	19	73.0
Branch of the Humanities	21	77.8	13	48.1	6	22.2
Total in the NAS	53	55.2	74	77.1	52	54.2

Table 6: The language considered most important to publish in.

Branches	Total in the NAS					
	Armenian		Russian		English	
	N	%	N	%	N	%
Branch of Natural Sciences	4	9.3	11	25.6	30	69.8
Branch of Physical, Math. and Technical Sciences	3	11.5	10	38.5	13	50.0
Branch of the Humanities	17	69.9	14	51.9	4	14.8
Total in the NAS	24	25.0	35	36.5	47	48.9

One of the main reasons, given by 17 respondents (48.6%), was that we have more access to the scientific world of that language (Table 7). This indicates that being a part of the Soviet scientific system is still influencing our scholars. Interestingly, age is also a factor here. No young scholar mentioned Russian as an important language to publish in. All the researchers who highlighted the importance of Russian belong to the older generation of scholars. Five of them (14.3%) pointed out that Russian is an international language. In the interview one of the researchers also considered Russian the most important language for him to publish in because it was easier for him to get published in this language. He emphasized that many Armenian researchers desire to publish in English, and they have forgotten that Russian is also a language of science. This interviewee belongs to the 66+ age group and he had studied in Moscow. Probably being accustomed to publishing in Russian, to reading in Russian and to following Russian research standards during Soviet times influenced his attitude towards Russian.

In the questionnaire, the respondents were asked to choose only one language, which they thought was the most important one for them to publish in. Nevertheless, 10 respondents (10.4%) ticked both Russian and English as the most important. It seems that for them both languages are equally important. This fact again shows that some researchers still consider Russian a dominant language for Armenian scholars.

The percentages of publications in Armenian and English are very close to each other - 55.2% and 54.2% respectively. In the humanities, the percentage of publications in Armenian is the highest - 77.8% and in English it is the lowest - 22.2%. This supports Swales' statement (2004) that the field of research influences the choice of language for publication. He points out that in the humanities the number of publications in the mother tongue is the highest. Interestingly, 2 interviewees who emphasized that language proficiency is not a problem if research is significant also highlighted that in the humanities language proficiency might be a problem. According to these interviewees,

Table 7: The reasons for publishing in Armenian, Russian or English.

The reasons for publishing	Total in the NAS					
	Armenian		Russian		English	
	N	% out of 24	N	% out of 35	N	% out of 47
to develop science in Armenia	9	37.5				
it is related to my field of research	10	41.7	4	11.4		
it is an international language			5	14.3	7	14.9
we have more access to the scientific world of that language			17	48.6		
it is a language of science					7	14.9
the audience is large			2	5.7	10	21.3
to get recognition in the international scientific world					5	10.6
the prestigious journals are in that language					11	11.5
to have access to the international scientific world					7	7.3

in the humanities research is not based on formulas or graphs and every word is significant.

The main reason identified with the importance of publishing in Armenian was it is related to my field of research - 10 (41.7%). Some of the participants explained that Armenian history, literature, linguistics were significant mainly for Armenians and thus research in these areas should be published in Armenian. Nine researchers (37.5%) mentioned that publishing in Armenian was important for developing science in Armenia. One of the interviewees pointed out that Armenian scholars should publish not only for the international scientific community but also for the local community. This may suggest that nowadays there is a tendency to publish in other languages and publishing in Armenian is not considered important. For this reason some researchers may think that publishing in the native language will help develop science in Armenia.

English is considered the most important language to publish in according to 47 (48.96%) participants. This shows that English is changing its role in scientific Armenia. In spite of close connections with the Russian scientific community, Armenian researchers are trying to publish in English in order to gain recognition in the international academic community. The reasons identified in the questionnaire were the prestigious journals are in that language - 11 (23.4%), the audience is large - 10 (21.3%), it is an international language - 7 (14.9%), it is the language of science - 7 (14.9%), to have access to the international scientific world - 7 (14.9%) and to get recognition in the international scientific world - 5 (10.6%). All these explanations show that Armenian

scholars are also trying to become a part of the international scientific community and to be recognized by scholars in the Inner Circle (see Figure 1).

Out of 59 participants (61.5%) who attempted to publish in international journals, 47 (79.7%) succeeded (Table 8). The researchers of the Branch of Natural Sciences have the highest percentage - 27 (84.4%). However, 35 (59.3%) participants did not try to publish in another international English-medium journal if their first attempt to publish was not successful. It is possible that being rejected creates the assumption that it is impossible for scholars in the periphery to publish in international journals. The fact that many non-Anglophone researchers do not try to publish in another international journal after being rejected is also mentioned by Canagarajah (2002).

The main difficulties which the participants have faced while trying to publish in English-medium journals are language proficiency - 28 (47.5%), lack of material resources - 26 (44%) and *unfamiliarity with academic discourse* - 13 (22.03%) (Table 9).

Table 8: Responses to the questions about the respondents' publication experiences.

	Branch of Natural Sciences		Branch of Physical, Math. and Technical Sciences		Branch of the Humanities		Total in the NAS	
	N	%	N	%	N	%	N	%
Number of researchers having scholarly publications since 2000	39	90.7	26	100	24	88.9	89	92.7
Number of researchers who attempted to publish in international English-medium journals or edited books	32	74.4	21	80.8	6	22.2	59	61.5
Number of researchers who succeeded in publishing articles in international English-medium journals or edited books	27	84.4	16	76.2	4	66.7	47	79.7

Table 9: The difficulties that faced the researchers while trying to publish in international journals.

Difficulties	Total in the NAS		
	N	% of total respondents	% out of who attempted to publish (59)
language proficiency	28	29.2	47.50
academic discourse	13	13.5	22.03
lack of material resources	26	27.1	44.07
access to the recent research in the field	7	7.3	11.90
difficulties in corresponding with editors and reviewers	5	5.2	8.50
interpreting comments and suggestions made by the referees and the editors	4	4.2	6.80
no difficulties	3	3.1	5.08

Table 10: The most crucial difficulties that faced the researchers while trying to publish in international journals.

The most crucial difficulties	Total in the NAS		
	N	% of total respondents	% out of who attempted to publish (59)
language proficiency	24	25.0	40.7
academic discourse	8	8.3	13.6
lack of material resources	17	17.7	28.8
access to the recent research in the field	7	7.3	11.9
difficulties in corresponding with editors and reviewers	2	2.1	3.4
interpreting comments and suggestions made by the referees and the editors	1	1.0	1.7

Language proficiency was considered the most crucial problem by 24 (40.7%) respondents and *lack of material resources* by 17 (28.8%) respondents (Table 10).

In the questionnaire the respondents identified all the difficulties which periphery scholars face when they try to publish in English-medium journals as was discussed by Canagarajah (2002): *language proficiency* - 28 (47.5%), *lack of material resources* - 26 (44.07%), *academic discourse* - 13 (22.03%), *access to the recent research* - 7 (11.9%), *difficulties in corresponding with editors and reviewers* - 5 (8.5%) and *interpreting comments and suggestions made by the referees and the editors* - 4 (6.8%). However, *language proficiency* was considered the most crucial problem - 24 (40.7%). Language proficiency was also emphasized as one of the main problems of Armenian scholars by the majority of interviewees (4 out of 6). The interviewees highlighted the following:

Interviewee 3: “We need to know En-

glish in order to present our significant research. If I give my article to someone for translation, it will not be a valid translation because translators are not familiar with my field of research. They just do word by word translation without understanding the article”.

Interviewee 4: “Language is a difficulty because if you don’t know English, you even can’t use the Internet”.

Interviewee 6: “I think language is a problem because if you present your significant ideas in poor English, people may misunderstand them”.

This issue appears to contradict the opinion of some experts who consider that language proficiency is not so important for being published in international journals (Hyland 2004, Swales 2004, Wood 2001). Probably researchers from different countries consider various factors crucial when they try to publish in international journals but according to the results of this study, language proficiency is the most frequently identified problem for Armenian scholars.

The second most crucial problem considered is *lack of material resources* - 17 (28.8%). Half of the interviewees also indicated this problem (3 out of 6). They articulated that Armenian scholars need financial support in order to do research. One of the interviewees explained:

Interviewee 5: “The state does not pay us money. Our salary is miserable. I am a candidate for a doctoral degree and my salary is 25000 drams [?\$85]. If I did not receive any grants, I could not even survive. In this case I couldn't think about any research. It is hard to be a researcher in Armenia”.

One of the researchers was of the view that the biggest difficulty for our scientists was that they were being forced to work with obsolete equipment, which decreased the quality of their research and significantly handicapped them from being able to compete with the scientists from other developed countries.

Table 11 shows that most of the participants *write an article in Armenian or Russian and have someone else translate it* - 22 (37.3%), the second most frequent response was *I write in Armenian or Russian and then translate it* - 13 (22%). Only 8 (13.6%) respondents write in English and submit without help.

Table 11: The ways of writing articles for international journals.

The ways of writing articles	Total in the NAS		
	N	% of total respondents %	% out of who attempted to publish (59)
I write in Armenian or Russian and then translate it	13	13.5	22.0
I write in Armenian or Russian and have smb. else translate it	22	22.9	37.3
I write in English and have smb. check the language before submitting	9	9.4	15.2
I write in English and submit without help	8	8.3	13.6
I rely on collaborators who can write in English	7	7.3	11.9

The results of the study further appear to illustrate/suggest that 6 (85.7%) junior researchers (22-35 age group) and 21 (80.7%) more experienced researchers (56 and above age group) have published in international journals (Table 12). This contradicts Swales' opinion (2004) that SRs have more chances to get published in international journals than JRs.

Out of 6 interviewees, 5 pointed out that SRs in Armenia do not have more chances to get published in international journals in comparison with JRs. They stated that Armenian SRs are not familiar with the international academic community and thus they are not at an advantage in comparison with JRs. One of these 5 researchers added that there might be a slight difference. The editor might consider the degree and experience of the senior researcher but the significance of research is primary.

One of the interviewees stated that JRs might even have more chances to get published in international journals because they were not accustomed to writing according to Russian standards, and it is easier for them to adopt international standards of writing a research article.

Interviewee 5: "For junior researchers it is easier to learn international standards.

They are not familiar with Soviet standards of writing. That's why it is easier for them to get published in international journals. Our senior researchers used to write following Soviet standards and it is hard for them to write according to new standards. I know some senior researchers who are very important people here but they can't get published there. Our young researchers get published more in international journals now".

At the end of the questionnaire, the participants were encouraged to write their comments. In this part only 9 (9.4%) respondents have made comments. They additionally emphasized that in order to get published in international journals it was very important to know English, to be really proficient in the field and to have modern equipment.

Thus, the results of the study show that Armenian scholars face many problems when they try to publish in international English-medium journals. The participants of the study consider *language proficiency and lack of material resources* most crucial for them. In spite of the increasing number of publications in English, the majority of publications are still in Russian which shows the on-going link between the Rus-

Table 12: The comparison of senior researchers' and junior researchers' publishing experiences.

Age group	Researchers who have not tried to publish		Researchers who have tried to publish		Researchers who tried but did not get published		Researchers who got published	
	N	%	N	%	N	%	N	%
22-35	8	53.3	7	46.7	1	14.3	6	85.7
36-55	13	33.3	26	66.7	6	23.1	20	76.9
56 and above	16	38.1	26	61.9	5	19.2	21	80.7

sian and Armenian academic communities. However, it is mainly the older generation of scholars who consider publishing in Russian important. No young scholar mentioned Russian as an important language to publish in. The majority of these participants considered English the most important language for publications. The results of the study also show that Armenian SRs are not at an advantage in comparison with JRs when they try to publish in international journals.

CONCLUSION

The nature and scope of the issues explored in this study may not allow us to make definitive conclusions. However, it is possible for us to make some concluding observations based on the context of this investigation. In light of this, we hasten to suggest that the following conclusions are neither atemporal nor objective, but are context-based confirmations of our understanding of a continuing phenomenon that has far-reaching implications on the Armenian academic community.

The results of the study show that Armenian scholars face many problems when they try to publish in international English-medium journals. The participants of the study consider language proficiency and *lack of material* resources most crucial for them. In spite of the increasing number of publications in English, the majority of publications are still in Russian which shows the on-going link between the Russian and Armenian academic communities. However, it is mainly the older generation of scholars who consider publishing in Russian important. No young scholar mentioned Russian

as an important language to publish in. The majority of these participants considered English the most important language for publications. The results of the study also show that Armenian SRs are not at an advantage in comparison with JRs when they try to publish in international journals.

Significance of the Study

Given that no prior research has been done to investigate the problems of Armenian researchers who try to publish the results of their research in English, this study presents some important information about the difficulties encountered by our scholars. It provides interesting data and shows that the major obstacle Armenian scholars face in attempting to publish in international journals is language proficiency. During this study many researchers, especially the young researchers, expressed the urgent need for courses in using English for specific purposes which would train and develop their academic writing skills for writing and publishing scientific papers in English. As many Armenian scholars have great potential for conducting significant research, an increase in their English language proficiency can help them get their papers published in international refereed journals.

LIMITATIONS OF THE STUDY

The study was conducted in Yerevan at the NAS and the findings relate only to researchers in Armenia. The involvement of researchers from different CIS countries and other countries where researchers are on the periphery would increase the validity of

this research and the findings could be generalized.

The second limitation is that this study does not reflect the whole range of research fields existing in the NAS. Including all the fields of research in the study might alter the findings.

Suggestions for Future Studies

In order to obtain more definitive understanding of the findings, a larger study should be conducted in the future. The inclusion of researchers from different countries could provide a clearer picture of the problems that scholars and researchers have when they attempt to publish in international journals. It is important to include researchers from countries that belong to different circles (Kachru, 1985) since depending on what the status of English is in their country; they might have different kinds of problems. Having reliable information about the difficulties of researchers will help to develop reasonable solutions to better support them.

REFERENCES

- Braine, G. (2003). "Negotiating the Gatekeepers: The journey of an Academic Article". In Casanave C. P. & Vandrick S. (Ed.). *Writing for scholarly publications: behind the scenes in language education* (pp.8-24). Mahwah, NJ: Lawrence Erlbaum Associates.
- Brutt-Griffler, J. (2002). *World English: a study of its development*. Frankfurt Lodge, UK: Multilingual Matters Ltd.
- Canagarajah, A. S. (2002). *A geopolitics of academic writing*. Pittsburgh, Pa.: University of Pittsburgh Press.
- Canagarajah, A. S. (2003). "A Somewhat Legitimate and Very Peripheral Participation". In Casanave C. P. & Vandrick S. (Ed.). *Writing for scholarly publications: behind the scenes in language education* (pp.8-24). Mahwah, NJ: Lawrence Erlbaum Associates.
- Flowerdew, J. (1999). "Writing for academic publication: The case of Hong Kong". *Journal of Second Language writing*, 8, 123-145.
- Flowerdew, J. (2000). "Discourse community, legitimate peripheral participation, and the non-native English speaking scholar". *TESOL Quarterly*, 34, 127-150.
- Hyland, K. (2004). *Disciplinary discourses: social interactions in academic writing*. Michigan, MI: The University of Michigan Press.
- Kachru, B. B. (1985). "Standards, Codification and Sociolinguistic Realism: the English Language in the Outer Circle". In Quirk R. & Widdowson H. (Ed.). *English in the world* (pp.11-34). Cambridge: Cambridge University Press.
- Khazanov, A.M. (1995). *After the USSR*. Wisconsin, WI: The University of Wisconsin Press.
- Research proceedings of the NAS of the Republic of Armenia, 2004* (2005). Yerevan: Gitutyun.
- Sargsian, F. T., Galoyan, G.A., Hambardzumian, S.A., Avetisian H.A., Barkhudarian, V.B. & Brutian G.A. et al. (2003). *Haiastani hanrapetutian gitutyunneri azgain academian 60 tarum*. [The National Academy of Sciences of the

- Republic of Armenia during 60 years]. Yerevan: Gitutyun.
- Sasaki, M. (2003). "A Scholar on the Periphery: Standing Firm, Walking Slowly". In Casanave C. P. & Vandrick S. (Ed.). *Writing for scholarly publications: behind the scenes in language education* (pp.8-24). Mahwah, NJ: Lawrence Erlbaum Associates.
- Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge, UK: Cambridge University Press.
- Swales, J. M. (2004). *Research genres: explorations and applications*. Cambridge, UK: Cambridge University Press.
- Wood, A. (2001). "International Scientific English: The Language of Research Scientists around the World". In Flowerdew J. & Peacock M. (Ed.). *Research perspectives on English for academic purposes* (pp.71-83). Cambridge: Cambridge University Press.

Appendix A

English version of the Questionnaire

Dear respondent,

My name is Taguhi Sahakyan. I am a graduate student of the Department of English Programs of the American University of Armenia. I am doing research under the supervision of Dr. Jo Lewkowicz. In my thesis I have decided to explore the difficulties that Armenian researchers face while trying to publish in English-medium journals. Learning about the problems will help English language teachers in Armenia in developing more effective ways to overcome them.

This is not a test so there are no "right" or "wrong" answers. If you wish you may fill out the questionnaire anonymously. I am interested in your personal opinions and experiences. Thank you very much for your help.

Sincerely,

Taguhi Sahakyan

e_mail: taguhi_sahakyan@mail.ru

Questionnaire

Please tick your age group:

- ☐ 22-35
☐ 36-45
☐ 46-55
☐ 56-65
☐ 66 or above

Please indicate your highest degree obtained:

- ☐ doctor of science
☐ candidate of science
☐ master's degree
☐ bachelor
☐ other, please specify _____

Please indicate your department:

- ☐ physical and mathematical, and technical sciences
☐ natural sciences
☐ humanities

Please indicate your field of research:

- ☐ physics
☐ astronomy
☐ informatics
☐ engineering
☐ mathematics
☐ geology
☐ biology
☐ zoology
☐ chemistry
☐ history
☐ seismology
☐ ecology
☐ medicine
☐ psychology
☐ archaeology
☐ philosophy
☐ sociology
☐ law

- ☐ economics
☐ linguistics
☐ literature
☐ art
☐ other, please specify _____

1. Have you written any scholarly publications (books, journal articles etc.) since 2000?

☐ Yes ☐ No

2. In what languages have you published since 2000? (Please tick all appropriate answers)

- ☐ Armenian
☐ Russian
☐ English
☐ other, please specify _____

3. What language do you consider most important for you to publish in? (Please choose ONE answer).

- ☐ Armenian
☐ Russian
☐ English
☐ other, please specify _____

Why is it important to publish in that language?

4. Have you attempted to publish in any international English-medium journals or edited books?

☐ Yes ☐ No

5. Have you succeeded in publishing any articles in international English-medium journals or edited books?

☐ Yes ☐ No

_____ Not applicable

6. If your attempt to publish in an international English-medium journal has not been successful do you try to publish

a. in another English-medium journal?

_____ Yes _____ No

_____ Not applicable

if NO, why _____

b. in another non-English-medium journal?

_____ Yes _____ No

_____ Not applicable

7. What difficulties have you faced while trying to publish in English-medium journals? (You can choose more than one answer).

_____ language proficiency

_____ academic discourse

_____ lack of material resources

_____ access to the recent research in the field

_____ difficulties in corresponding with editors and reviewers

_____ interpreting comments and suggestions made by the referees and the editors

_____ other, please specify _____

Which of the above do you consider the most crucial and why?

8. If you have tried to publish in English how do you write your articles in English? (Please choose ONE answer).

_____ I write in Armenian or Russian and then translate it

_____ I write in Armenian or Russian and have someone else to translate it

_____ I write in English and have someone check the language before submitting

_____ I write in English and submit without help

_____ I rely on collaborators who can write in English

_____ other, please specify _____

_____ Not applicable

9. If you would like to add any comments about your experiences in attempting to publish in English, please write them in the space below

If you would be willing to be interviewed about your experiences in academic writing, please write your name _____

how to contact you _____

Thank you for cooperation

Appendix B

Sample Questions for the Interview

1. In your questionnaire you wrote that for you Armenian was the most important language to publish in. Your explanation was for developing our culture and science. What do you mean here? (Do you think that publishing only in Armenian will develop our country?)
2. You mentioned only language as a difficulty in connection with your attempts to get published in international journals. Does this mean that you haven't faced any other difficulties or that language is the biggest problem for you? Can you explain further?
3. What do you think is the main problem(s) that Armenian researchers face when they try to publish in international journals?
4. Some participants of this study think that language is not a problem if the research is significant. What do you think? Why?
5. Do you think that senior researchers have more chances to get published in international journals? Why? Why not?
6. Do you have any other comments you would like to share with me?